

Title (en)  
RADAR COMMUNICATIONS WITH OVERSAMPLING

Title (de)  
RADARKOMMUNIKATION MIT ÜBERABTASTUNG

Title (fr)  
COMMUNICATIONS RADAR AVEC SURÉCHANTILLONNAGE

Publication  
**EP 4095558 A2 20221130 (EN)**

Application  
**EP 22169227 A 20220421**

Priority  
US 202117329470 A 20210525

Abstract (en)  
Aspects of the disclosure are directed to apparatuses, systems and methods for radar processing. An apparatus may include receiver circuitry (124) to receive and sample radar signals reflected from a target, and processing circuitry (130) to carry out the following steps: representations of the reflections are transformed into the time-frequency domain where they are oversampled; the oversampled representations of the reflections are inversely transformed to provide resampled reflections; and positional characteristics of the target may then be ascertained by constructing a range response characterizing the target based on the resampled reflections.

IPC 8 full level  
**G01S 13/931** (2020.01); **G01S 7/288** (2006.01); **G01S 7/35** (2006.01); **G01S 13/26** (2006.01); **G01S 13/34** (2006.01); **G01S 13/42** (2006.01); **G01S 13/58** (2006.01)

CPC (source: EP US)  
**G01S 7/2883** (2021.05 - EP); **G01S 7/356** (2021.05 - EP US); **G01S 7/411** (2013.01 - US); **G01S 13/26** (2013.01 - EP); **G01S 13/343** (2013.01 - EP); **G01S 13/347** (2013.01 - US); **G01S 13/42** (2013.01 - EP); **G01S 13/505** (2013.01 - US); **G01S 13/584** (2013.01 - EP); **G01S 13/931** (2013.01 - EP)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4095558 A2 20221130**; **EP 4095558 A3 20221207**; US 11668790 B2 20230606; US 2022390555 A1 20221208

DOCDB simple family (application)  
**EP 22169227 A 20220421**; US 202117329470 A 20210525